

This is the 2<sup>nd</sup> issue of our quarterly newsletter. *The GIS Quarterly Legend* focuses on projects and activities of the last quarter as well as to inform you on upcoming GIS events.

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## THE WESTFIELD PUBLIC WORKS GIS DIVISION

*The Westfield Public Works GIS Division consists of the following associates:*

*Eric Becker – GIS Coordinator, Leane Welsh – GIS/GPS Technician,  
Derek Todd – GIS/GPS Technician, Tim O'Leary – Locator Technician and  
Paul Taylor – Contract Associate*

October – December 2007

## GIS Mapping Project:

### Department of Economic Development



## Letter From The GIS Coordinator

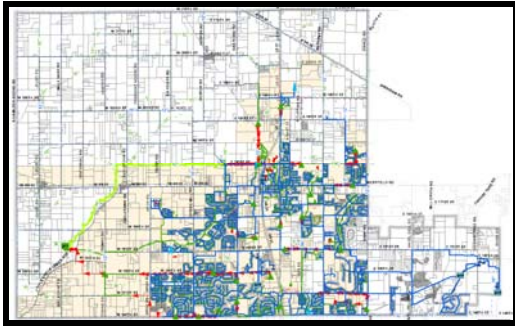
A top of the year to everyone,

Westfield is now officially a city and continually growing. The GIS is also growing with new datasets, new applications, and increasing usage. We are always enhancing the GIS to utilize the state of the art capabilities allotted to us. As we move forward in 2008, some exciting highlights will be the additional development of the interactive web mapping services to meet the needs of both city employees and the public interest, incorporating templates that can be utilized in various daily workflows and I will be leading a series of GIS training sessions for all levels of users across all aspects of city departments. As always, I look forward to your request, suggestions and feedback.

Thank you,  
*Eric Becker*

Eric Becker  
GIS Coordinator

GIS has created a series of maps to aid in the City of Westfield's Economic Development Initiative's vision to increase productive capacity within the community by identifying, packaging, and marketing the available land within Westfield. This effort helps to attract businesses, help existing businesses expand operations, and promote the necessary social and physical infrastructure needed to support such development. Their goal is to promote Westfield as an outstanding place to live, work, play and an outstanding place in which to conduct business. GIS helps the Economic Development Department by producing maps and databases for these prospective clients by searching and identifying land that meets their needs. This query is later used to create a series of maps and databases for the client.



## Available GIS Data

*The following are some of the layers that are available for use in the GIS*

### WPWD Maintained Westfield Maintained

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Address Points</li> <li>• Council Districts</li> <li>• Easements</li> <li>• Fire Map Book Data</li> <li>• GPS Data</li> <li>• Parks &amp; Trails</li> <li>• Police Beats</li> <li>• Sanitary and Storm Lines &amp; Structures</li> <li>• Street Lines</li> <li>• Water System</li> <li>• Hydrants, Valves, Lines</li> <li>• Westfield Facilities</li> <li>• Voting Locations</li> </ul> | <ul style="list-style-type: none"> <li>• Land Use</li> <li>• Zoning</li> <li>• Building Footprints</li> <li>• Corporate Limits</li> <li>• Hydrology</li> <li>• Parcels</li> <li>• Regulated Drains</li> </ul> |
|--|---|

### County Maintained

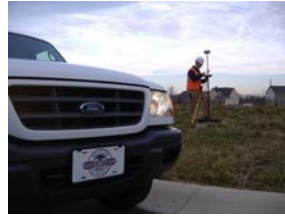
### State Maintained

### Other Data Available

- PLLS Grid
- Electric Poles
- Fiber Optic Network
- Gas Lines

## Daily GIS Operations Public Works GPS

The WPWD has three (3) Trimble GPS units: Two (2) are Survey grade TSC2 units and one (1) is a mapping grade Trimble XH unit.



Some of the daily uses of these units are to:

- Capture location data associated with existing utility infrastructure.
- Capture quality control points to verify the digital As-Built submittal data to.
- Can be utilized by WPWD staff to expedite the field location request of the departmental infrastructure for locate tickets and anytime we need to field locate our infrastructure.  
(remember to *call before you dig* – just dial **811**)
- The Trimble XH can be used with a digital camera via bluetooth technology to capture a GPS point with digital photograph tied to the point. Each photo is therefore correctly associated to a GIS feature.

## GIS DEFINITION Global Positioning System

The Global Positioning System (GPS) is the only fully functional Global Navigation Satellite System (GNSS). Utilizing a constellation of at least 24 medium earth orbit satellites that transmit precise microwave signals, the system enables a GPS receiver to determine its location, speed, direction and time.

Developed by the United States Department of Defense, the satellite constellation is managed by the United States Air Force 50<sup>th</sup> Space Wing at a cost of \$750M per year.

Following the demise of Korean Air Lines Flight 007 in 1983, President Ronald Reagan issued a directive making the system available for free for civilian use as a common good.

– Wikipedia

<http://en.wikipedia.org/wiki/Gps>

## GIS Community Outreach

- Oct - Eric Becker & Leane Welsh presented "GIS for Engineers"
  - [http://www.westfield.in.gov/egov/docs/1201639662\\_205718.pdf](http://www.westfield.in.gov/egov/docs/1201639662_205718.pdf)
- Nov - Westfield Municipal Buildings Map
  - [http://www.westfield.in.gov/egov/docs/1200057527\\_67718.pdf](http://www.westfield.in.gov/egov/docs/1200057527_67718.pdf)
- Dec – Interactive GIS Street Snow Plow Status Map on the Web
  - <http://gis.westfield.in.gov/snow2008>
- Dec. 14th - Eric Becker presented GIS to high school students

## GIS Web Links

CITY OF WESTFIELD MAP IN .PDF FORMAT

[http://www.westfield.in.gov/egov/docs/1201205619\\_985565.pdf](http://www.westfield.in.gov/egov/docs/1201205619_985565.pdf)

CITY OF WESTFIELD ON LINE FORM for MAP and DATA REQUEST

<https://www.westfield.in.gov/egov/apps/action/center.exe?action=form&item=16>

WESTFIELD PUBLIC WORKS REQUEST FOR INFORMATION (.PDF)

<https://www.westfield.in.gov/egov/docs/518281180702220.pdf>

## Upcoming GIS Events

- IGIC – Indiana Geographic Information Annual Conference
  - 2/19 & 2/20, Hyatt Regency Downtown Indianapolis
- IGIC Seminar - Approaches to Using Oblique Aerial Imagery
  - 3/28, 1:00-3:30pm - Indiana State Library Nonmembers: \$20
- Monthly GIS Training conducted by Eric Becker
  - Wed **2/12** (12:45 – 2), **3/13** (7:45 – 9), **4/10** (7:45 – 9)

## GIS Success Story GIS for Engineers

In 2004, the Westfield Public Works Department incorporated into the UTILITY AND INFRASTRUCTURE CONSTRUCTION STANDARDS AND SPECIFICATIONS.  
<http://www.westfield.in.gov/egov/docs/1111162413893.htm>

All Projects must adhere to the digital As-Built review process and acquire an acceptance statement before the performance bond may be flipped to a maintenance bond.

The GIS division staff processes the data into the departmental GIS. This data becomes integrated into the GIS which some of the uses are to accurately locate, identify, tracking of asset management, produce maps of the utility infrastructure as well as other uses that are managed by Westfield Public Works.

On October 19, 2007, Eric Becker and Leane Welsh presented to over 50 people from around the state at the Indiana Geographic Information Council "GIS for Engineers" special presentation. This presentation was given to explain how our GIS department reviews and processes As-Built submittals. A copy of the presentation may be viewed by clicking here:

[http://www.westfield.in.gov/egov/docs/1201639662\\_205718.pdf](http://www.westfield.in.gov/egov/docs/1201639662_205718.pdf)